

Pedestrian, Bicycle, and Traffic Safety Advisory Committee

September 27, 2018

Overview

- Challenges
 - Peak versus non-peak (speed + urban centers)
 - Multiple threat
 - Long distances between marked crossings and signals
 - Lighting
- Opportunities
 - Reducing speed
 - Providing refuge
 - Improving lighting
 - Transit

— PEDESTRIAN FATALITY & SERIOUS INJURY RISK +

18%



50%



77%



—

20
MPH

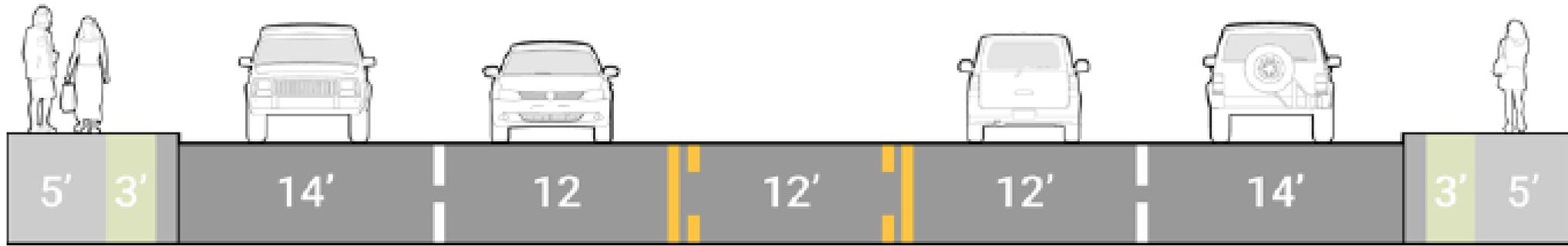
30
MPH

40
MPH

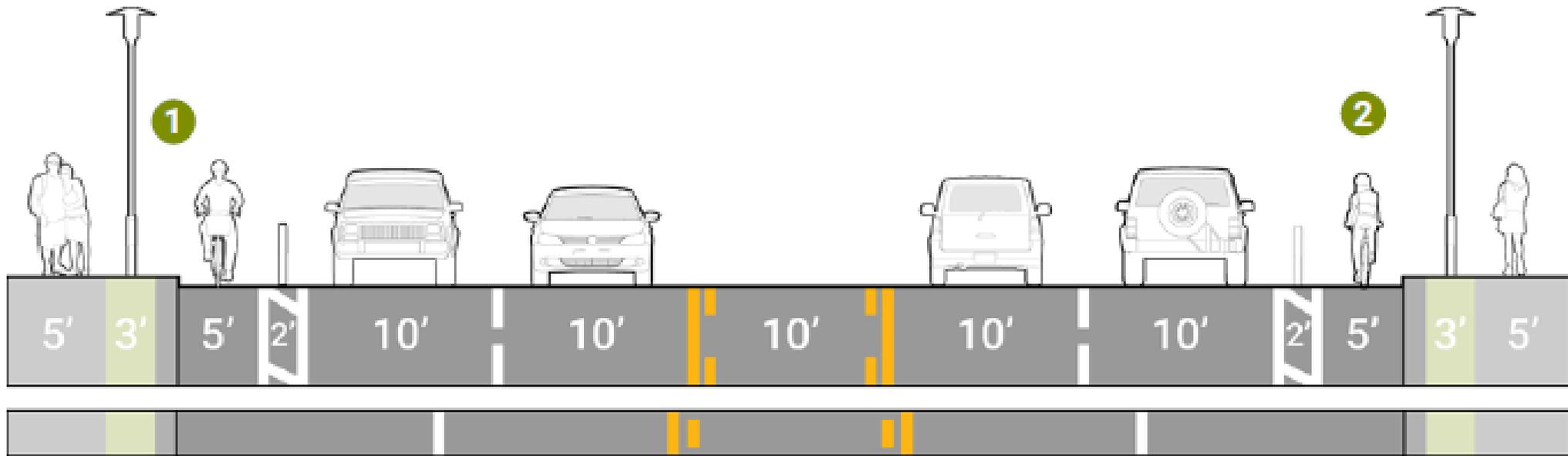
+



CONE OF VISION



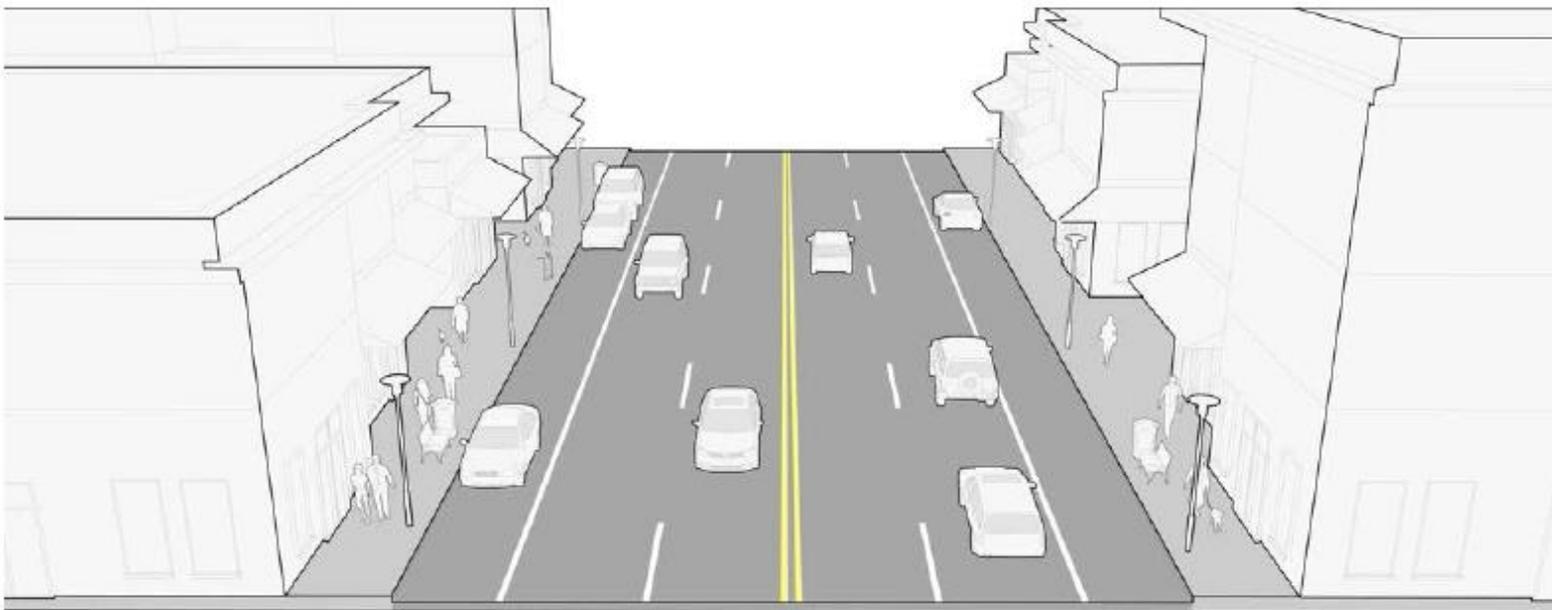
Conventional



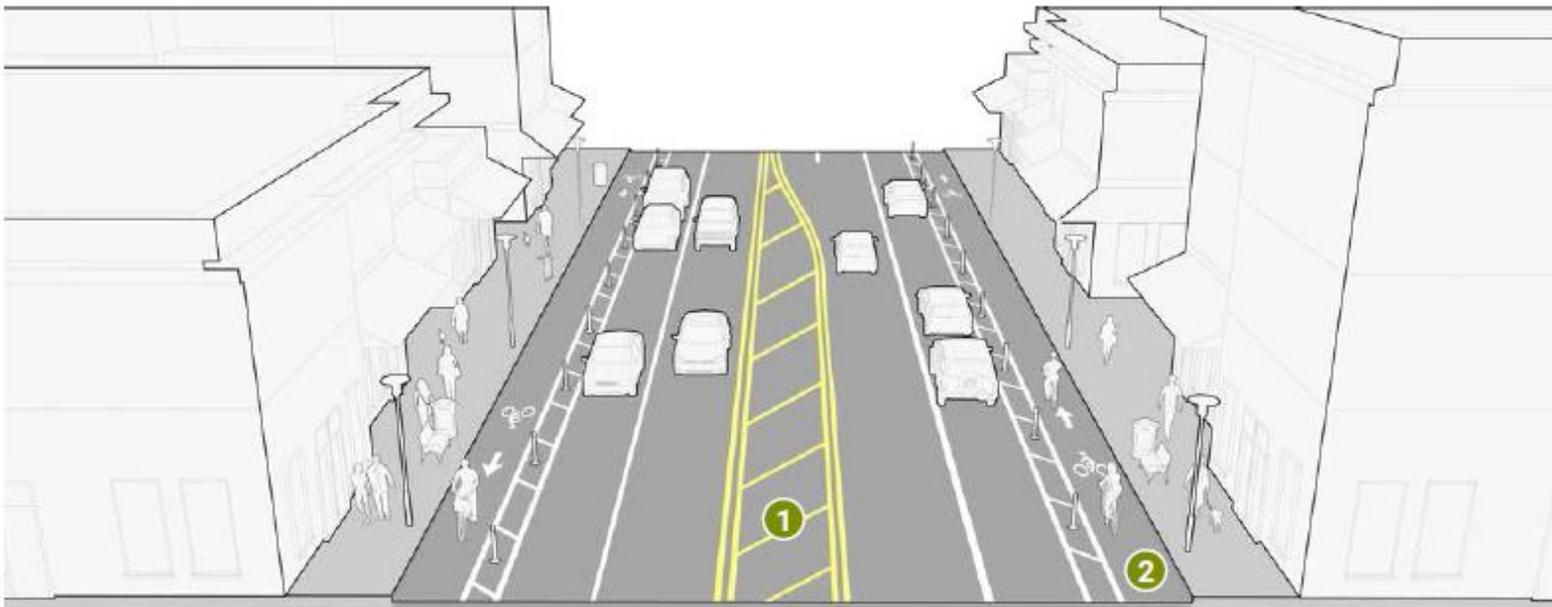
Flexibility Enables Separated Bike Lane



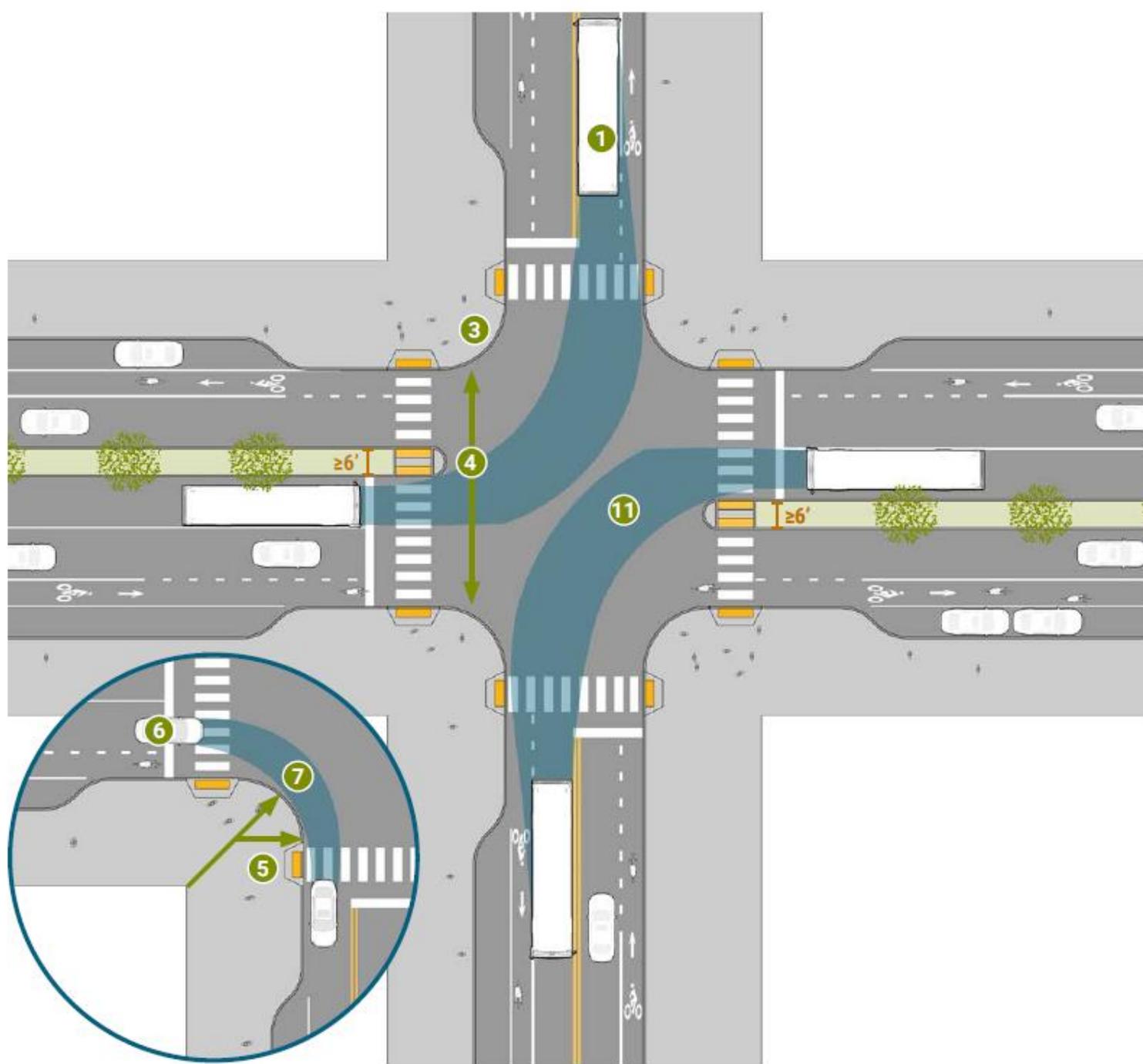
Conventional

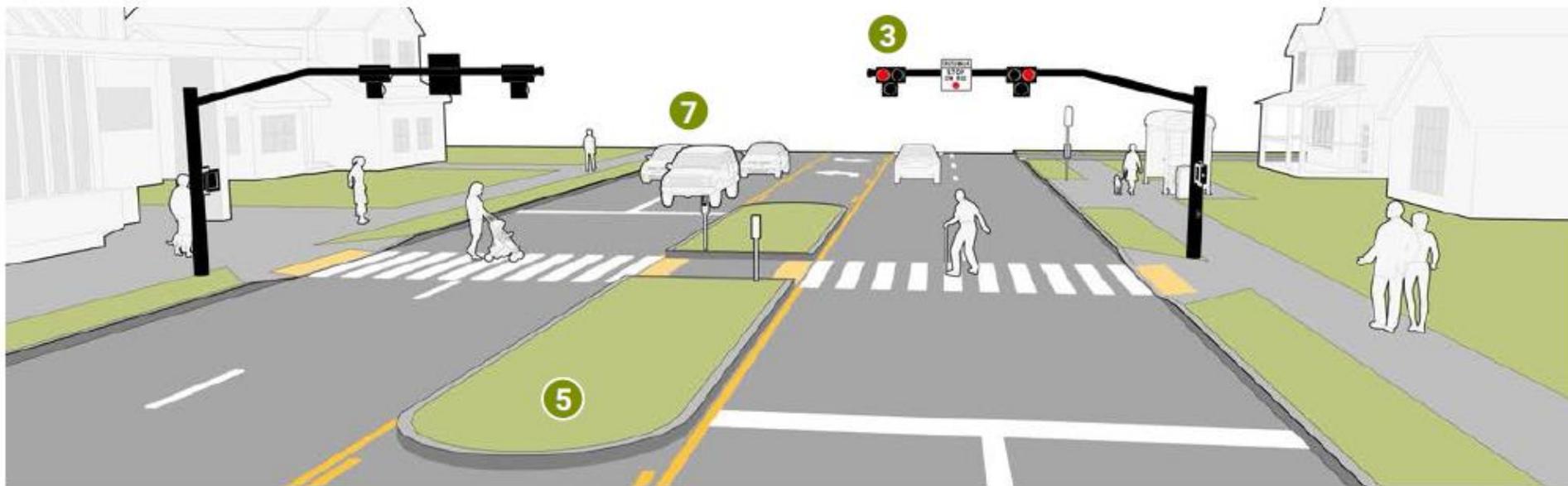


BEFORE ROAD DIET

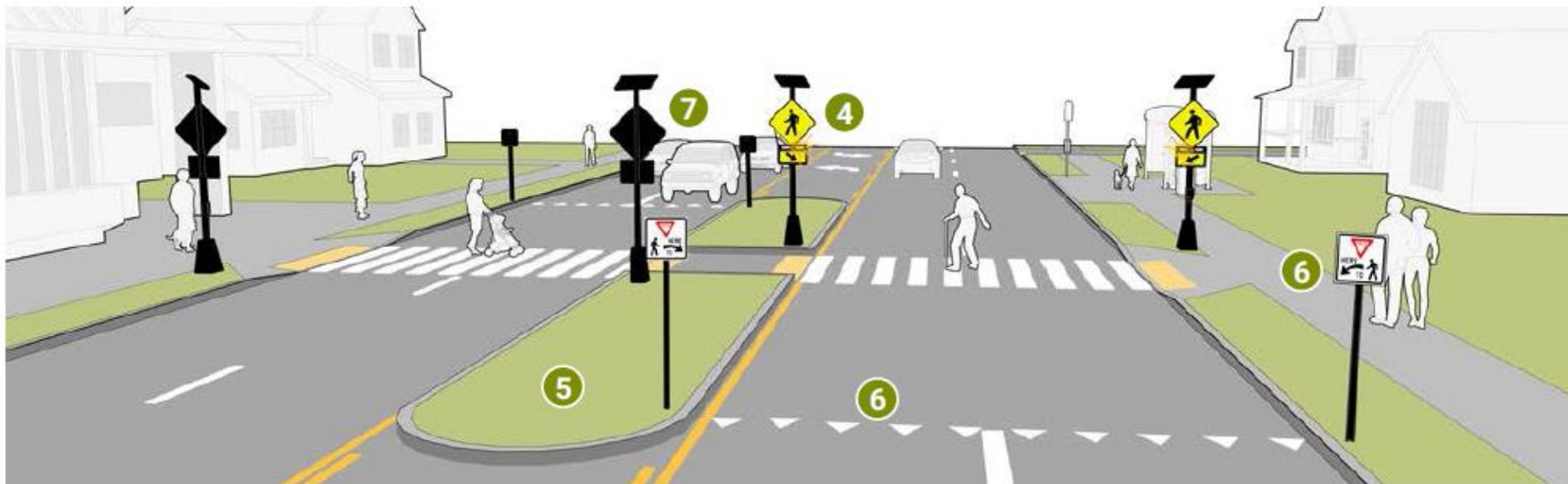


AFTER ROAD DIET

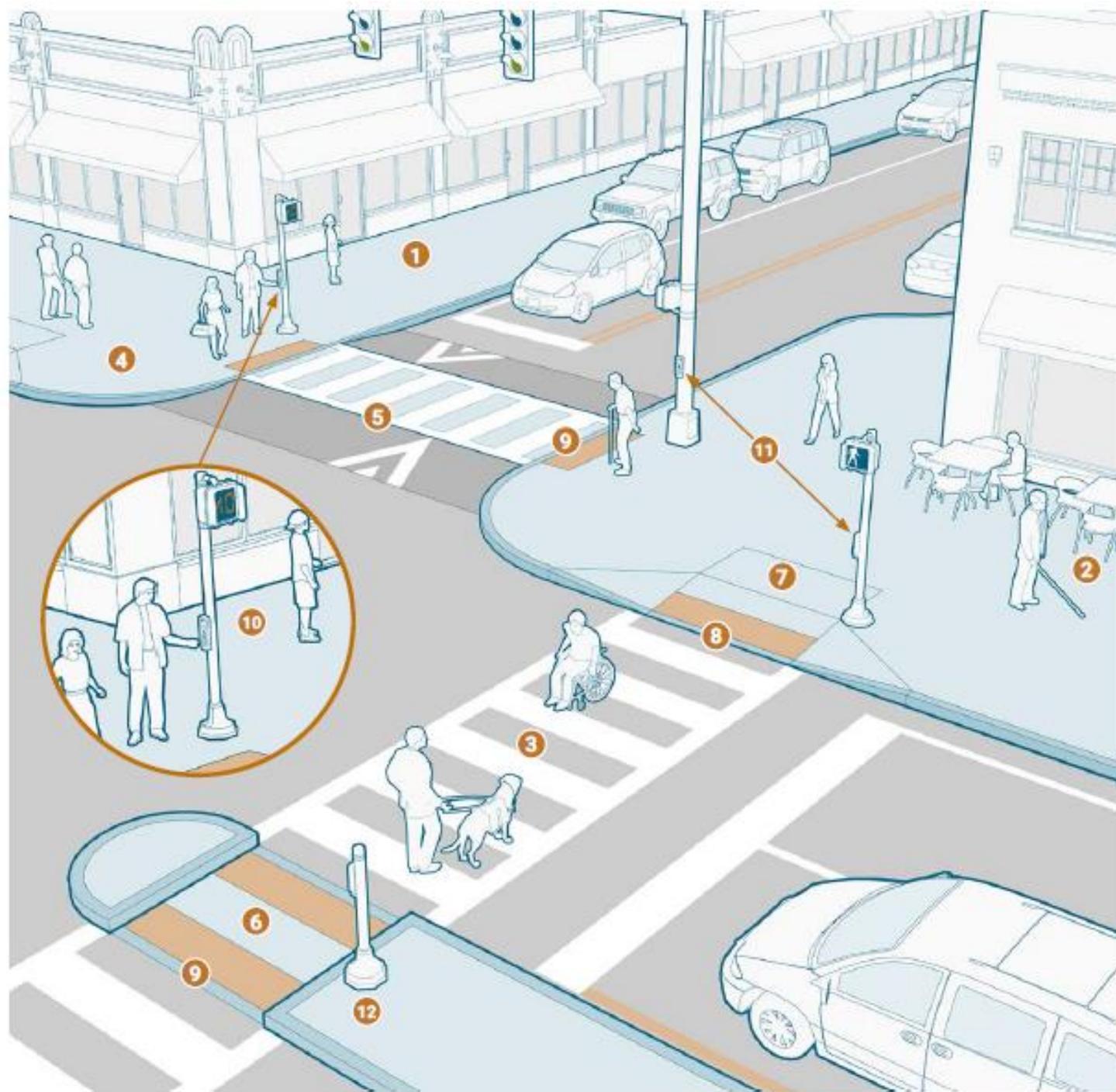




PEDESTRIAN HYBRID BEACON AND CROSSING ISLAND

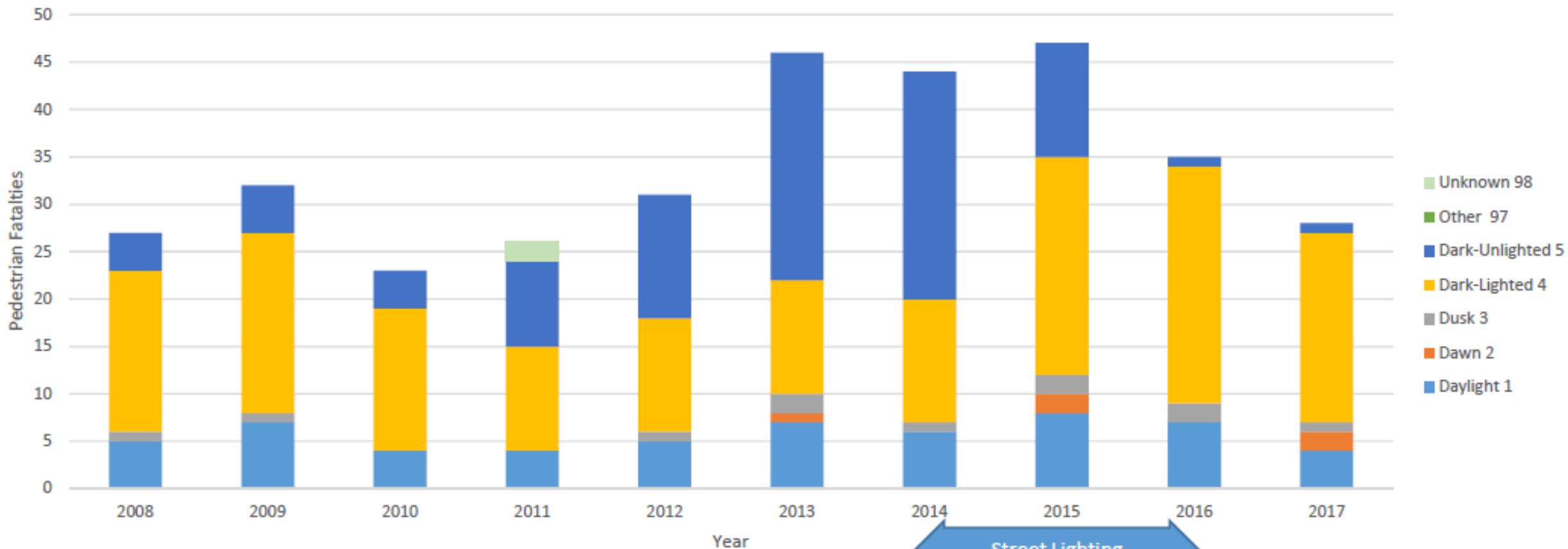


RECTANGULAR RAPID FLASHING BEACON AND CROSSING ISLAND



48 Fatalities in Dark, Unlighted Conditions from 2013-2014; Only 2 from 2016-2017

Detroit Pedestrian Fatalities by Lighting Conditions



Notes: 2017 data is preliminary and may climb as later crash reports are filed
There are more fatalities reported here than the Michigan Traffic Crash Facts web site since the latter ignores crash reports that are filed late.



Pedestrian and Bicycle Information Center

Data & Resources

Community Support

Planning & Design

Training & Events

Behavior Change

Safety effects of automated enforcement systems

This new PBIC info brief summarizes the latest research on the safety effects of automated speed and red light enforcement systems.



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7 hours ago



America Walks is now accepting applications for the Community Change Grant program. Submit ideas for projects to increase walking, access, and a culture of inclusive health through

Safety

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Safe Transportation for Every Pedestrian (STEP)

Cost-effective countermeasures with known safety benefits can help reduce pedestrian fatalities at uncontrolled crossing locations and unsignalized intersections.

Pedestrians account for over 17.5 percent of all fatalities in motor vehicle traffic crashes, and the majority of these deaths occur at uncontrolled crossing locations such as mid-block or un-signalized intersections. These are among the most common locations for pedestrian fatalities generally because of inadequate pedestrian *crossing facilities* and insufficient or inconvenient *crossing opportunities*, all of which create barriers to safe, convenient, and complete pedestrian networks.

Expecting pedestrians to travel significantly out of their way to cross a roadway to reach their destination is unrealistic and counterproductive to encouraging healthier transportation options. By focusing on uncontrolled locations, agencies can address a significant national safety problem and improve quality of life for pedestrians of all ages and abilities.

Pedestrian Safety Countermeasures

FHWA is promoting the following pedestrian safety countermeasures through the fourth round of Every Day Counts (EDC-4):

- **Road Diets** can reduce vehicle speeds and the number of lanes pedestrians cross, and they can create space to add new pedestrian facilities.
- **Pedestrian hybrid beacons** (PHBs) are a beneficial intermediate option between RRFBs and a full pedestrian signal. They provide positive stop control in areas without the high pedestrian traffic volumes that typically warrant signal installation.
- **Pedestrian refuge islands** allow pedestrians a safe place to stop at the midpoint of the roadway before crossing the remaining distance. This is particularly helpful for older pedestrians or others with limited mobility.
- **Raised crosswalks** can reduce vehicle speeds.
- **Crosswalk visibility enhancements**, such as crosswalk lighting and enhanced signing and marking, help drivers detect pedestrians—particularly at night.



Roadside Design Improvement at Curves



Reduced Left-Turn Conflict Intersections



Systemic Application of Multiple Low Cost Countermeasures at Stop-Controlled Intersections



Leading Pedestrian Interval



Local Road Safety Plan



USLIMITS2



Enhanced Delineation and Friction for Horizontal Curves



Longitudinal Rumble Strips and Stripes on Two-Lane Roads



Median Barrier



Safety Edges_{SM}



Backplates with Retroreflective Borders



Corridor Access Management



Dedicated Left- and Right-Turn Lanes at Intersections



Roundabouts



Yellow Change Intervals



Medians and Pedestrian Crossing Islands in Urban and Suburban Areas



Pedestrian Hybrid Beacon



Road Diet



Walkways



Road Safety Audit